Distribution and Characteristics of Nocturnal Resting Areas of Surf Scoter *(Melanitta perspicillata)*, White-Winged Scoter *(M. fusca)*, and other Seabird Species in Puget Sound

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Diurnal distribution of marine birds in Puget Sound has been well documented (Nysewander et al. 2004), however, little is known about nocturnal distribution. VHF and satellite telemetry were used to identify nocturnal resting locations in three regions of the Puget Sound. After nocturnal locations were identified, opportunistic boat surveys were conducted, using radar, to locate the flocks; species composition was then determined visually by spotlight. Distance traveled from diurnal to nocturnal areas ranged up to 11 Km one-way, each day. Nocturnal flocks were generally characterized as occurring in more open / exposed waters, and consisted of both mixed, and segregated species flocks. Understanding nocturnal marine bird distribution is important in assessing key areas of marine bird use. These nocturnal flocks are vulnerable to oil contamination in the event of a spill. For example, containment strategies of spills that emphasize primarily near shore areas that host high diurnal bird densities run the risk of neglecting the higher concentrations that congregate from a wider area into more open waters at night. As marine bird nocturnal resting areas in Puget Sound are poorly understood, only a handful being documented to date, it is important to continue and expand research efforts.